CLAIMS

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- 3 1. A method for quantitatively evaluating the integrity of a data set recorded on a storage
- 4 medium, the recorded data set including error-correction codes, the method:
- 5 comprising at least two of the steps of
- 6 enumerating data subsets that are unreadable,
- 7 enumerating data subsets that are erroneously read and uncorrected, and
- 8 enumerating data subsets that are initially erroneously read and subsequently corrected;
- 9 and
- further comprising the step of computing a data integrity rating for the data set using at least
- one of enumerations of the unreadable data subsets, the erroneously-read-and-
- uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
- 13 2. The method of Claim 1, wherein the storage medium comprises a CD.
- 3. The method of Claim 1, wherein the storage medium comprises a DVD.
- A method for quantitatively evaluating the integrity of a data set recorded on a storage medium, the recorded data set including error-correction codes, the method comprising the
- 17# steps of:
- enumerating data subsets that are initially erroneously read and subsequently corrected; and
- computing a data integrity rating for the data set using enumeration of the erroneously-read-
- and-corrected data subsets.
- 21 5. The method of Claim 4, wherein the storage medium comprises a CD.
- 22 6. The method of Claim 4, wherein the storage medium comprises a DVD.
- 7. The method of Claim 4, further comprising the steps of:
- enumerating data subsets that are unreadable;
- enumerating data subsets that are erroneously read and uncorrected; and
- 26 computing a data integrity rating for the data set using at least one of enumerations of the
- unreadable data subsets, the erroneously-read-and-uncorrected data subsets, and the
- 28 erroneously-read-and-corrected data subsets.
- 29 8. The method of Claim 7, further comprising the steps of:
- 30 identifying and logging data subsets within the data set that are unreadable, thereby
- enumerating the unreadable data subsets;

1		identifying and logging data subsets within the data set that are erroneously read and
2		uncorrected, thereby enumerating the erroneously-read-and-uncorrected data subsets;
3		and
4		identifying and logging data subsets within the data set that are initially erroneously read
5		and subsequently corrected, thereby enumerating the erroneously-read-and-corrected
6		data subsets.
7	9.	A method for quantitatively evaluating the integrity of a data set recorded on a storage
8		medium, the recorded data set including error-correction codes, the method comprising the
9		steps of:
10		enumerating data subsets that are initially erroneously read and subsequently corrected, and
11		measuring an over-sampled rating for the erroneously-read-and-corrected subsets; and
12		computing a data integrity rating for the data set using at least one of enumeration of
13 <mark>0</mark>		erroneously-read-and-corrected data subsets and the over-sampled rating.
14	10.	The method of Claim 9, wherein the storage medium comprises a CD.
14 Ú 15	11.	The method of Claim 9, wherein the storage medium comprises a DVD.
16 ¹ 17	12.	The method of Claim 9, wherein the over-sampled rating is determined by performing the
17		steps of:
18		computing a time interval for reading the data subset at a pre-determined readout rate;
185 194 205		measuring a time interval required for reading the data subset at the pre-determined readout
20		rate; and
2		computing the over-sampled rating using the measured time interval and the computed time
22		interval.
23	13.	The method of Claim 9, wherein the over-sampled rating is determined by performing the
24		steps of:
25		identifying and logging data subsets within the data set that are initially erroneously read
26		and subsequently corrected, thereby enumerating the erroneously-read-and-corrected
27		data subsets;
28		logging the number of re-reads required to correct erroneously-read-and-corrected data
29		subsets; and
30		computing the over-sampled rating using the numbers of re-reads.
31	14.	The method of Claim 9, wherein:

1		the over-sampled rating is determined by performing the steps of
2		identifying and logging data subsets within the data set that are initially erroneously
3		read and subsequently corrected, thereby enumerating the erroneously-read-and-
4		corrected data subsets,
5		logging the number of re-reads required to correct erroneously-read-and-corrected data
6		subsets, and
7		computing the over-sampled rating using the numbers of re-reads;
8		identifying and logging data subsets within the data set that are unreadable, thereby
9		enumerating the unreadable data subsets;
10		identifying and logging data subsets within the data set that are erroneously read and
11	2	uncorrected, thereby enumerating the erroneously-read-and-uncorrected data subsets;
12 <u>f</u>		and
13		computing a data integrity rating for the data set using at least one of enumerations of the
13 T 14 L		unreadable data subsets, the erroneously-read-and-uncorrected subsets, and the
15 L		erroneously-read-and-corrected data subsets, and the over-sampled rating.
16	15.	An apparatus for quantitatively evaluating the integrity of a data set recorded on a storage
17)	medium, the recorded data set including error-correction codes, the apparatus comprising:
18 (T 19 (T		a readout device adapted for reading the data set recorded on the storage medium; and
		a programmed processor operatively coupled to the readout device, the processor being
20		programmed for performing at least two of the steps of
21		enumerating data subsets that are unreadable,
22		enumerating data subsets that are erroneously read and uncorrected, and
23		enumerating data subsets that are initially erroneously read and subsequently corrected;
24		and
25		wherein the processor is further programmed for computing a data integrity rating for the
26		data set using at least one of enumerations of the unreadable data subsets, the
27		erroneously-read-and-uncorrected data subsets, and the erroneously-read-and-corrected
28		data subsets.
29	16.	The apparatus of Claim 15, wherein the storage medium comprises a CD.
30	17.	The apparatus of Claim 15, wherein the storage medium comprises a DVD.

1	18.	An apparatus for quantitatively evaluating the integrity of a data set recorded on a storage
2		medium, the recorded data set including error-correction codes, the apparatus comprising:
3		a readout device adapted for reading the data set recorded on the storage medium; and
4		a programmed processor operatively coupled to the readout device, the processor being
5		programmed for
6		enumerating data subsets that are initially erroneously read and subsequently corrected;
7		and
8		computing a data integrity rating for the data set using enumeration of the erroneously-
9		read-and-corrected data subsets.
10	19.	The apparatus of Claim 18, wherein the storage medium comprises a CD.
11	20.	The apparatus of Claim 18, wherein the storage medium comprises a DVD.
12	21.	The apparatus of Claim 18, wherein the processor is further programmed for:
1 To		enumerating data subsets that are unreadable;
14		enumerating data subsets that are erroneously read and uncorrected; and
147 141 161		computing a data integrity rating for the data set using at least one of enumerations of the
160 17		unreadable data subsets, the erroneously-read-and-uncorrected data subsets, and the
		erroneously-read-and-corrected data subsets.
19 7 20 20	22.	The apparatus of Claim 21, wherein the processor is further programmed for:
191		identifying and logging data subsets within the data set that are unreadable, thereby
20		enumerating the unreadable data subsets;
21		identifying and logging data subsets within the data set that are erroneously read and
22		uncorrected, thereby enumerating the erroneously-read-and-uncorrected data subsets;
23		and
24		identifying and logging data subsets within the data set that are initially erroneously read
25		and subsequently corrected, thereby enumerating the erroneously-read-and-corrected
26		data subsets.
27	23.	An apparatus for quantitatively evaluating the integrity of a data set recorded on a storage
28		medium, the recorded data set including error-correction codes, the apparatus comprising:
29		a readout device adapted for reading the data set recorded on the storage medium; and
30		a programmed processor operatively coupled to the readout device, the processor being

programmed for

1		enumerating data subsets that are initially erroneously read and subsequently corrected
2		and
3		measuring an over-sampled rating for the erroneously-read-and-corrected subsets; and
4		computing a data integrity rating for the data set using at least one of enumeration of
5		erroneously-read-and-corrected data subsets and the over-sampled rating.
6	24.	The apparatus of Claim 23, wherein the storage medium comprises a CD.
7	25.	The apparatus of Claim 23, wherein the storage medium comprises a DVD.
8	26.	The apparatus of Claim 23, wherein processor is programmed for determining the over-
9		sampled rating by:
10		computing a time interval for reading the data subset at a pre-determined readout rate;
11		measuring a time interval required for reading the data subset at the pre-determined readout
12		rate; and
		computing the over-sampled rating using the measured time interval and the computed time
1仙		interval.
15	27.	The apparatus of Claim 23, wherein the processor is programmed for determining the over-
164		sampled rating by:
18 18 19 19 20		identifying and logging data subsets within the data set that are initially erroneously read
18		and subsequently corrected, thereby enumerating the erroneously-read-and-corrected
167		data subsets;
20		logging the number of re-reads required to correct erroneously-read-and-corrected data
21		subsets; and
22		computing the over-sampled rating using the numbers of re-reads.
23	28.	The apparatus of Claim 23, wherein the processor is further programmed for:
24		determining the over-sampled rating by
25		identifying and logging data subsets within the data set that are initially erroneously
26		read and subsequently corrected, thereby enumerating the erroneously-read-and-
27		corrected data subsets,
28		logging the number of re-reads required to correct erroneously-read-and-corrected data
29		subsets, and
30		computing the over-sampled rating using the numbers of re-reads;

1		identifying and logging data subsets within the data set that are unreadable, thereby
2		enumerating the unreadable data subsets;
3		identifying and logging data subsets within the data set that are erroneously read and
4		uncorrected, thereby enumerating the erroneously-read-and-uncorrected data subsets;
5		and
6		computing a data integrity rating for the data set using at least one of enumerations of the
7		unreadable data subsets, the erroneously-read-and-uncorrected subsets, and the
8		erroneously-read-and-corrected data subsets, and the over-sampled rating.
9	29.	A method for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned
10		recorded data products by a data product re-seller, the method comprising the steps of:
11		reading data from a data product offered by an owner of the data product;
120		comparing data read from the data product with data in a data product information database;
130		identifying the data product, if the data product is identified as being listed in the data
14.		product information database;
		quantitatively evaluating the integrity of a data set recorded on the data product and
		computing a data integrity rating for the data product;
150 180 180 200 21		determining a purchase price for the data product to be offered by the re-seller to the owner
		of the data product, the purchase price being determined based on at least one of the
19		data integrity rating for the data product, inventory information for the data product
20		from a data product inventory database, order information for the data product in a data
21		product order database, and previous purchase and re-sale information for the data
22		product from a data product sales database;
23		updating inventory information in response to a purchase of the data product from the owner
24		by the re-seller;
25		determining a re-sale price for the data product to be offered by the re-seller to a buyer of
26		the data product, the purchase price being determined based on at least one of the data
27		integrity rating, inventory information, order information, and previous purchase and re-
28		sale information; and
29		updating at least one of inventory information, order information, and sales information in
30		response to a re-sale of the data product by the re-seller to the buyer.
31	30.	The method of Claim 29, wherein the data product comprises a CD.

1	31.	The method of Claim 29, wherein the data product comprises a DVD.
2	32.	The method of Claim 29, wherein the evaluating step:
3		comprises at least two of the steps of
4		enumerating data subsets that are unreadable,
5		enumerating data subsets that are erroneously read and uncorrected, and
6		enumerating data subsets that are initially erroneously read and subsequently corrected;
7		and
8		further comprises the step of computing a data integrity rating for the data set using at least
9		one of enumerations of the unreadable data subsets, the erroneously-read-and-
10		uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
11	33.	The method of Claim 29, wherein the data product includes error correction codes, and the
12		evaluating step comprises the steps of:
130		enumerating data subsets that are initially erroneously read and subsequently corrected; and
14		computing a data integrity rating for the data set using enumeration of erroneously-read-
1 5 U		and-corrected data subsets.
	34.	The method of Claim 29, wherein the data product includes error correction codes, and the
		evaluating step comprises the steps of:
		enumerating data subsets that are initially erroneously read and subsequently corrected, and
184		determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
200		computing a data integrity rating for the data set using at least one of enumeration of the
21		erroneously-read-and-correct data subsets and the over-sampled rating.
22	35.	The method of Claim 29, further comprising the step of prompting a user to enter data
23		product information for the data product into the data product information database, if the
24		data product is not identified as being listed in the product information database.
25	36.	The method of Claim 29, wherein:
26		the data product is a music CD and the data product databases are music CD databases, and
27		the method further comprises at least one of the steps of
28		reading and storing in the music CD information database any of track information,

title, and artist from the CD that is not already stored in the music CD database,

1		prompting a user to scan cover art of the music CD and storing cover art thus scanned
2		into the music CD information database, if the cover art is not already present in
3		the music CD database,
4		prompting a user to scan lyrics of the music CD and storing lyrics thus scanned into the
5		music CD information database, if the lyrics are not already present in the music
6		CD database, and
7		prompting a user to scan liner notes of the music CD and storing liner notes thus
8		scanned into the music CD information database, if the liner notes are not already
9		present in the music CD database.
10	37.	The method of Claim 29, wherein:
11		the data product is a music CD, and data product information database is a music CD
2		information database; and
		the method further comprises the steps of analyzing music data recorded on tracks of the
40		music CD to generate unique track identification data therefor and storing the track
1 5[]		identification information in the music CD information database, if the track
		identification information is not already present in the music CD information database.
7	38.	The method of Claim 29, further comprising the step of enabling the buyer independently to
		quantitatively evaluate the integrity of the data set recorded on a re-sold data product and to
51		compute the data integrity rating for the re-sold data product, thereby enabling the buyer to
20		verify the data integrity rating of the re-sold data product and compare it to re-seller-
1		reported data integrity rating.
22	39.	A method for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned
23		recorded data products by a data product re-seller, the method comprising the steps of:
24		reading data from a data product offered by an owner of the data product;
25		comparing data read from the data product with data in a data product information database
26		identifying the data product, if the data product is identified as being listed in the data
27		product information database;
28		quantitatively evaluating the integrity of a data set recorded on the data product and
29		computing a data integrity rating for the data product;
30		determining a purchase price for the data product to be offered by the re-seller to the owner
31		of the data product, the purchase price being determined based on at least one of the

1		data integrity rating for the data product, inventory information for the data product
2		from a data product inventory database, order information for the data product in a data
3		product order database, and previous purchase and re-sale information for the data
4		product from a data product sales database;
5		updating inventory information in response to a purchase of the data product from the owner
6		by the re-seller;
7		determining a re-sale price for the data product to be offered by the re-seller to a buyer of
8		the data product, the purchase price being determined based on at least one of the data
9		integrity rating, inventory information, order information, and previous purchase and re-
10		sale information; and
11		updating at least one of inventory information, order information, and sales information in
12		response to a re-sale of the data product by the re-seller to the buyer,
120		wherein:
140		the databases receive information from multiple independent data product re-sellers;
		the multiple independent product re-sellers may access the databases; and
16 ¹ 17		a data product purchased by a first one of the multiple re-sellers may be made available for
17		re-sale to a buyer by a second one of the multiple re-sellers.
194 194 20	40.	The method of Claim 39, wherein the evaluating step:
19		comprises at least two of the steps of
2		enumerating data subsets that are unreadable,
21		enumerating data subsets that are erroneously read and uncorrected, and
22		enumerating data subsets that are initially erroneously read and subsequently corrected;
23		and
24		further comprises the step of computing a data integrity rating for the data set using at least
25		one of enumerations of the unreadable data subsets, the erroneously-read-and-
26		uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
27	41.	The method of Claim 39, wherein the data product includes error correction codes, and the
28		evaluating step comprises the steps of:
29		enumerating data subsets that are initially erroneously read and subsequently corrected; and
30		computing a data integrity rating for the data set using enumeration of erroneously-read-
31		and-corrected data subsets.

- 1 42. The method of Claim 39, wherein the data product includes error correction codes, and the evaluating step comprises the steps of:
- enumerating data subsets that are initially erroneously read and subsequently corrected, and
- determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
- 5 computing a data integrity rating for the data set using at least one of enumeration of the
- 6 erroneously-read-and-correct data subsets and the over-sampled rating.
- 7 43. The method of Claim 39, wherein the data product comprises a CD.
- 8 44. The method of Claim 39, wherein the data product comprises a DVD.
- 9 45. The method of Claim 39, wherein the databases are accessible online to the multiple re-10 sellers.
- 11 46. The method of Claim 39, wherein the identity of the first one of the re-sellers may be concealed from the buyer.
 - 47. The method of Claim 39, wherein one of the multiple re-sellers may select which others of the multiple re-sellers may offer for re-sale to buyers data products purchased by the one of the multiple retailers.
 - 48. The method of Claim 39, wherein one of the multiple re-sellers may select from which others of the multiple re-sellers to offer for re-sale to buyers data products purchased by the others of the multiple retailers.
 - 49. The method of Claim 39, wherein a data product purchased by the first one of the multiple re-sellers and re-sold to a buyer by the second one of the multiple re-sellers may be shipped from the first one of the re-sellers to the second one of the re-sellers for subsequent delivery to the buyer.
- The method of Claim 39, wherein a data product purchased by a first one of the multiple resellers and re-sold to a buyer by a second one of the multiple re-sellers may be shipped from the first one of the re-sellers directly to the buyer.
- 51. The method of Claim 39, wherein:

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- 27 a buyer may submit to a re-seller a bid for a requested data product, the bid including at least 28 one of a desired re-sale price and a desired data integrity rating; and
- the bid thus submitted may be entered into the data product order database.
- 30 52. A method for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned recorded data products by a data product re-seller, the method comprising the steps of:

1		reading data from a data product offered by an owner of the data product;
2		comparing data read from the data product with data in a data product information database;
3		identifying the data product, if the data product is identified as being listed in the data
4		product information database;
5		quantitatively evaluating the integrity of a data set recorded on the data product and
6		computing a data integrity rating for the data product;
7		determining a purchase price for the data product to be offered by the re-seller to the owner
8		of the data product, the purchase price being determined based on at least one of the
9		data integrity rating for the data product, inventory information for the data product
10		from a data product inventory database, order information for the data product in a data
11		product order database, and previous purchase and re-sale information for the data
12		product from a data product sales database;
120		updating inventory information in response to a purchase of the data product from the owner
		by the re-seller;
1 5 1		updating inventory information in response to a purchase of the data product from the owner
1 6		by the re-seller;
17		updating at least one of inventory information, order information, and sales information in
18, 19, 19, 20, 21, 21, 21, 21, 21, 21, 21, 21, 21, 21		response to a re-sale of the data product by the re-seller to the buyer,
19		wherein:
2 0		the databases receive information from multiple independent data product re-sellers;
21		the multiple independent product re-sellers may access the databases;
22		a data product purchased by a first one of the multiple re-sellers may be made available for
23		re-sale to a buyer by a second one of the multiple re-sellers;
24		the multiple re-sellers may deliver purchased data products to a pre-owned data product
25		distributor;
26		the distributor may access and update at least one of inventory information, order
27		information, and sales information; and
28		a data product re-sold to a buyer by a re-seller may be delivered from the distributor.
29	53.	The method of Claim 52, wherein the evaluating step:
30		comprises at least two of the steps of
31		enumerating data subsets that are unreadable,

1		enumerating data subsets that are erroneously read and uncorrected, and
2		enumerating data subsets that are initially erroneously read and subsequently corrected
3		and
4		further comprises the step of computing a data integrity rating for the data set using at least
5		one of enumerations of the unreadable data subsets, the erroneously-read-and-
6		uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
7	54.	The method of Claim 52, wherein the data product includes error correction codes, and the
8		evaluating step comprises the steps of:
9		enumerating data subsets that are initially erroneously read and subsequently corrected; and
10		computing a data integrity rating for the data set using enumeration of erroneously-read-
11		and-corrected data subsets.
12	55.	The method of Claim 52, wherein the data product includes error correction codes, and the
		evaluating step comprises the steps of:
14		enumerating data subsets that are initially erroneously read and subsequently corrected, and
		determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
16		computing a data integrity rating for the data set using at least one of enumeration of the
17		erroneously-read-and-correct data subsets and the over-sampled rating.
	56.	The method of Claim 52, wherein the data product comprises a CD.
101	57.	The method of Claim 52, wherein the data product comprises a DVD.
	58.	The method of Claim 52, wherein the databases are accessible online to the multiple re-
2T		sellers and the distributor.
22	59.	The method of Claim 52, wherein the distributor may request delivery of selected data
23		products from the multiple re-sellers, the data products being selected based on at least one
24		of inventory information, order information, and sales information.
25	60.	A system for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned
26		recorded data products by a data product re-seller, the system:
27		comprises at least one of
28		a data product information database containing data product information,
29		a data product inventory data base containing inventory information,
30		a data product order database containing order information, and
31		a data product sales database containing sales information;

1		and further comprises
2		a readout device adapted for reading a data set recorded on the data product, and
3		a programmed processor operatively linked to the databases and the readout device,
4		wherein the processor is programmed for:
5		reading data from a data product offered by an owner of the data product;
6		comparing data read from the data product with data in the data product information
7		database;
8		identifying the data product, if the data product is identified as being listed in the data
9		product information database;
10		quantitatively evaluating the integrity of the data set recorded on the data product and
11		computing a data integrity rating for the data product;
12		determining a purchase price for the data product to be offered by the re-seller to the owner
150		of the data product, the purchase price being determined based on at least one of the
147		data integrity rating for the data product, inventory information, order information, and
151		previous purchase and re-sale information;
		updating inventory information in response to a purchase of the data product from the owner
		by the re-seller;
17 18 19 20 LL 21		determining a re-sale price for the data product to be offered by the re-seller to a buyer of
19		the data product, the purchase price being determined based on at least one of the data
20		integrity rating, inventory information, order information, and previous purchase and re-
21		sale information; and
22		updating at least one of inventory information, order information, and sales information in
23		response to a re-sale of the data product by the re-seller to the buyer.
24	61.	The system of Claim 60, wherein the data product comprises a CD.
25	62.	The system of Claim 60, wherein the data product comprises a DVD.
26	63.	The system of Claim 60, wherein the evaluating step:
27		comprises at least two of the steps of
28		enumerating data subsets that are unreadable,
29		enumerating data subsets that are erroneously read and uncorrected, and
30		enumerating data subsets that are initially erroneously read and subsequently corrected;
31		and

1		further comprises the step of computing a data integrity rating for the data set using at least
2		one of enumerations of the unreadable data subsets, the erroneously-read-and-
3		uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
4	64.	The system of Claim 60, wherein the data product includes error correction codes, and the
5		evaluating step comprises the steps of:
6		enumerating data subsets that are initially erroneously read and subsequently corrected; and
7		computing a data integrity rating for the data set using enumeration of erroneously-read-
8		and-corrected data subsets.
9	65.	The system of Claim 60, wherein the data product includes error correction codes, and the
10		evaluating step comprises the steps of:
11		enumerating data subsets that are initially erroneously read and subsequently corrected, and
125		determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
130		computing a data integrity rating for the data set using at least one of enumeration of the
141		erroneously-read-and-correct data subsets and the over-sampled rating.
	66.	The system of Claim 60, wherein the processor is further programmed for prompting a user
16.		to enter data product information for the data product into the data product information
l a		database, if the data product is not identified as being listed in the product information
18		database.
19	67.	The system of Claim 60, wherein:
		the data product is a music CD and the data product databases are music CD databases, and
21		the processor is further programmed for
22		reading and storing in the music CD information database any of track information,
23		title, and artist from the CD that is not already stored in the music CD database,
24		prompting a user to scan cover art of the music CD and storing cover art thus scanned
25		into the music CD information database, if the cover art is not already present in
26		the music CD database,
27		prompting a user to scan lyrics of the music CD and storing lyrics thus scanned into the
28		music CD information database, if the lyrics are not already present in the music
29		CD database, and

1		prompting a user to scan liner notes of the music CD and storing liner notes thus
2		scanned into the music CD information database, if the liner notes are not already
3		present in the music CD database.
4	68.	The system of Claim 60, wherein:
5		the data product is a music CD, and data product information database is a music CD
6		information database; and
7		the processor is further programmed for analyzing music data recorded on tracks of the
8		music CD to generate unique track identification data therefor and storing the track
9		identification information in the music CD information database, if the track
10		identification information is not already present in the music CD information database.
11	69.	The system of Claim 60, wherein the processor is further programmed for enabling the
125		buyer independently to quantitatively evaluate the integrity of the data set recorded on a re-
137		sold data product and to compute the data integrity rating for the re-sold data product,
14		thereby enabling the buyer to verify the data integrity rating of the re-sold data product and
		compare it to re-seller-reported data integrity rating.
16	70.	A system for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned
也		recorded data products by a data product re-seller, the system:
		comprises at least one of
19		a data product information database containing data product information,
20		a data product inventory data base containing inventory information,
21		a data product order database containing order information, and
22		a data product sales database containing sales information;
23		and further comprises
24		a readout device adapted for reading a data set recorded on the data product, and
25		a programmed processor operatively linked to the databases and the readout device,
26		wherein the processor is programmed for:
27		reading data from a data product offered by an owner of the data product;
28		comparing data read from the data product with data in the data product information
29		database;
30		identifying the data product, if the data product is identified as being listed in the data
31		product information database;

1		quantitatively evaluating the integrity of the data set recorded on the data product and
2		computing a data integrity rating for the data product;
3		determining a purchase price for the data product to be offered by the re-seller to the owner
4		of the data product, the purchase price being determined based on at least one of the
5		data integrity rating for the data product, inventory information, order information, and
6		previous purchase and re-sale information;
7		updating inventory information in response to a purchase of the data product from the owner
8		by the re-seller;
9		determining a re-sale price for the data product to be offered by the re-seller to a buyer of
10		the data product, the purchase price being determined based on at least one of the data
11		integrity rating, inventory information, order information, and previous purchase and re-
12		sale information;
		updating at least one of inventory information, order information, and sales information in
140		response to a re-sale of the data product by the re-seller to the buyer;
15		enabling the databases to receive information from multiple independent data product re-
16		sellers;
1 4 1 7		enabling the multiple independent product re-sellers to access the databases; and
18-		enabling a data product purchased by a first one of the multiple re-sellers to be made
190		available for re-sale to a buyer by a second one of the multiple re-sellers.
2	71.	The system of Claim 70, wherein the evaluating step:
2		comprises at least two of the steps of
22		enumerating data subsets that are unreadable,
23		enumerating data subsets that are erroneously read and uncorrected, and
24		enumerating data subsets that are initially erroneously read and subsequently corrected;
25		and
26		further comprises the step of computing a data integrity rating for the data set using at least
27		one of enumerations of the unreadable data subsets, the erroneously-read-and-
28		uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
29	72.	The system of Claim 70, wherein the data product includes error correction codes, and the
30		evaluating step comprises the steps of:
31		enumerating data subsets that are initially erroneously read and subsequently corrected; and

- computing a data integrity rating for the data set using enumeration of erroneously-readand-corrected data subsets.
- 73. The system of Claim 70, wherein the data product includes error correction codes, and the evaluating step comprises the steps of:
- enumerating data subsets that are initially erroneously read and subsequently corrected, and determining an over-sampled rating for the erroneously-read-and-corrected subsets; and computing a data integrity rating for the data set using at least one of enumeration of the
- 8 erroneously-read-and-correct data subsets and the over-sampled rating.
- 9 74. The system of Claim 70, wherein the data product comprises a CD.
- 10 75. The system of Claim 70, wherein the data product comprises a DVD.
- 76. The system of Claim 70, wherein the databases are accessible online to the multiple resellers.
 - 77. The system of Claim 70, wherein the processor is further programmed for enabling concealment of the identity of the first one of the re-sellers from the buyer.
 - 78. The system of Claim 70, wherein the processor is further programmed for enabling one of the multiple re-sellers to select which others of the multiple re-sellers may offer for re-sale to buyers data products purchased by the one of the multiple retailers.
 - 79. The system of Claim 70, wherein the processor is further programmed for enabling one of the multiple re-sellers to select from which others of the multiple re-sellers to offer for resale to buyers data products purchased by the others of the multiple retailers.
- 22 Product purchased by the first one of the multiple re-sellers and re-sold to a buyer by the second one of the multiple re-sellers to be shipped from the first one of the re-sellers to the second one of the re-sellers for subsequent delivery to the buyer.
- 25 81. The system of Claim 70, wherein the processor is further programmed for enabling a data 26 product purchased by a first one of the multiple re-sellers and re-sold to a buyer by a second 27 one of the multiple re-sellers to be shipped from the first one of the re-sellers directly to the 28 buyer.
- 29 82. The system of Claim 70, wherein the processor is further programmed for enabling: 30 a buyer to submit to a re-seller a bid for a requested data product, the bid including at least 31 one of a desired re-sale price and a desired data integrity rating; and

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1		the bid thus submitted to be entered into the data product sales database.
2	83.	A system for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned
3		recorded data products by a data product re-seller, the system:
4		comprises at least one of
5	•	a data product information database containing data product information,
6		a data product inventory data base containing inventory information,
7		a data product order database containing order information, and
8		a data product sales database containing sales information;
9		and further comprises
10		a readout device adapted for reading a data set recorded on the data product, and
11		a programmed processor operatively linked to the databases and the readout device,
120		wherein the processor is programmed for:
		reading data from a data product offered by an owner of the data product;
144		comparing data read from the data product with data in the data product information
15 <u>0</u>		database;
164		identifying the data product, if the data product is identified as being listed in the data
1		product information database;
1		quantitatively evaluating the integrity of the data set recorded on the data product and
197		computing a data integrity rating for the data product;
20		determining a purchase price for the data product to be offered by the re-seller to the owner
21		of the data product, the purchase price being determined based on at least one of the
22		data integrity rating for the data product, inventory information, order information, and
23		previous purchase and re-sale information;
24		updating inventory information in response to a purchase of the data product from the owner
25		by the re-seller;
26		determining a re-sale price for the data product to be offered by the re-seller to a buyer of
27		the data product, the purchase price being determined based on at least one of the data
28		integrity rating, inventory information, order information, and previous purchase and re-
29		sale information;
30		updating at least one of inventory information, order information, and sales information in
31		response to a re-sale of the data product by the re-seller to the buyer;

1		enabling the databases to receive information from multiple independent data product re-
2		sellers;
3		enabling the multiple independent product re-sellers to access the databases;
4		enabling a data product purchased by a first one of the multiple re-sellers to be made
5		available for re-sale to a buyer by a second one of the multiple re-sellers;
6		enabling the multiple re-sellers to deliver purchased data products to a pre-owned data
7		product distributor;
8		enabling the distributor to access and update at least one of inventory information, order
9		information, and sales information; and
10		enabling a data product re-sold to a buyer by a re-seller to be delivered from the distributor.
11	84.	The system of Claim 83, wherein the evaluating step:
127		comprises at least two of the steps of
		enumerating data subsets that are unreadable,
140		enumerating data subsets that are erroneously read and uncorrected, and
		enumerating data subsets that are initially erroneously read and subsequently corrected
16		and
17		further comprises the step of computing a data integrity rating for the data set using at least
18		one of enumerations of the unreadable data subsets, the erroneously-read-and-
194		uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
20	85.	The system of Claim 83, wherein the data product includes error correction codes, and the
21		evaluating step comprises the steps of:
22		enumerating data subsets that are initially erroneously read and subsequently corrected; and
23		computing a data integrity rating for the data set using enumeration of erroneously-read-
24		and-corrected data subsets.
25	86.	The system of Claim 83, wherein the data product includes error correction codes, and the
26		evaluating step comprises the steps of:
27		enumerating data subsets that are initially erroneously read and subsequently corrected, and
28		determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
29		computing a data integrity rating for the data set using at least one of enumeration of the
30		erroneously-read-and-correct data subsets and the over-sampled rating.
31	87.	The system of Claim 83, wherein the data product comprises a CD.

- 1 88. The system of Claim 83, wherein the data product comprises a DVD.
- 2 89. The system of Claim 83, wherein the databases are accessible online to the multiple resellers.
- 90. The system of Claim 83, wherein the processor is further programmed for enabling the distributor to request delivery of selected data products from the multiple re-sellers, the data products being selected based on at least one of inventory information, order information,
- 7 and sales information.

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- 91. A method for evaluation and sale of a pre-owned recorded data product by an owner of the data product to a buyer, the method comprising the steps of:
- reading data from a data product offered for sale by an owner of the data product;

 comparing data read from the data product with data in a data product information database;

 identifying the data product, if the data product is identified as being listed in the data

 product information database;
 - quantitatively evaluating the integrity of a data set recorded on the data product and computing a data integrity rating for the data product;
 - determining a sale price for the data product to be offered by the owner to the buyer, the purchase price being determined based on at least one of the data integrity rating for the data product, inventory information for the data product from a data product inventory database, order information for the data product in a data product order database, and previous purchase and re-sale information for the data product from a data product sales database;
- 22 updating inventory information in response to an offer to sell the data product by the owner; 23 and
- updating at least one of inventory information, order information, and sales information in response to sale of the data product by the owner to the buyer.
- 26 92. The method of Claim 91, wherein the data product comprises a CD.
- 27 93. The method of Claim 91, wherein the data product comprises a DVD.
- 28 94. The method of Claim 91, wherein the evaluating step:
- 29 comprises at least two of the steps of
- enumerating data subsets that are unreadable,
- enumerating data subsets that are erroneously read and uncorrected, and

1		enumerating data subsets that are initially erroneously read and subsequently corrected;
2		and
3		further comprises the step of computing a data integrity rating for the data set using at least
4		one of enumerations of the unreadable data subsets, the erroneously-read-and-
5		uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
6	95.	The method of Claim 91, wherein the data product includes error correction codes, and the
7		evaluating step comprises the steps of:
8		enumerating data subsets that are initially erroneously read and subsequently corrected; and
9		computing a data integrity rating for the data set using enumeration of erroneously-read-
10		and-corrected data subsets.
11	96.	The method of Claim 91, wherein the data product includes error correction codes, and the
12		evaluating step comprises the steps of:
1300 1410 1500 1610 17		enumerating data subsets that are initially erroneously read and subsequently corrected, and
144		determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
15		computing a data integrity rating for the data set using at least one of enumeration of the
16		erroneously-read-and-correct data subsets and the over-sampled rating.
	97.	The method of Claim 91, further comprising the step of prompting the owner to enter data
18 I		product information for the data product into the data product information database, if the
190		data product is not identified as being listed in the product information database.
20	98.	The method of Claim 91, wherein:
21		the data product is a music CD and the data product databases are music CD databases, and
22		the method further comprises at least one of the steps of
23		reading and storing in the music CD information database any of track information,
24		title, and artist from the CD that is not already stored in the music CD database,
25		prompting the owner to scan cover art of the music CD and storing cover art thus
26		scanned into the music CD information database, if the cover art is not already
27		present in the music CD database,
28		prompting the owner to scan lyrics of the music CD and storing lyrics thus scanned into
29		the music CD information database, if the lyrics are not already present in the
30		music CD database, and

1	prompting the owner to scan liner notes of the music CD and storing liner notes thus
2	scanned into the music CD information database, if the liner notes are not already
3	present in the music CD database.
4	99. The method of Claim 91, wherein:
5	the data product is a music CD, and data product information database is a music CD
6	information database; and
7	the method further comprises the steps of analyzing music data recorded on tracks of the
8	music CD to generate unique track identification data therefor and storing the track
9	identification information in the music CD information database, if the track
10	identification information is not already present in the music CD information database.
11	100. The method of Claim 91, wherein the owner and the buyer may access the databases online.
12	101.A system for evaluation and sale of a pre-owned recorded data product by an owner of the
137	data product to a buyer, the system:
	comprises at least one of
150	a data product information database containing data product information,
16	a data product inventory data base containing inventory information,
17	a data product order database containing order information, and
185 194 194 205	a data product sales database containing sales information;
194	and further comprises
20	a readout device adapted for reading a data set recorded on the data product, and
21	a programmed processor operatively linked to the databases and the readout device,
22	wherein the processor is programmed for:
23	reading data from a data product offered by an owner of the data product;
24	comparing data read from the data product with data in the data product information
25	database;
26	identifying the data product, if the data product is identified as being listed in the data
27	product information database;
28	quantitatively evaluating the integrity of the data set recorded on the data product and
29	computing a data integrity rating for the data product;
30	determining a sale price for the data product to be offered by the owner to the buyer, the
31	purchase price being determined based on at least one of the data integrity rating for the

1	data product, inventory information, order information, and previous purchase and re-
2	sale information;
3	updating inventory information in response to an offer to sell the data product by the owner
4	and
5	updating at least one of inventory information, order information, and sales information in
6	response to sale of the data product by the owner to the buyer.
7	102. The system of Claim 101, wherein the data product comprises a CD.
8	103. The system of Claim 101, wherein the data product comprises a DVD.
9	104. The system of Claim 101, wherein the evaluating step:
10	comprises at least two of the steps of
11	enumerating data subsets that are unreadable,
12	enumerating data subsets that are erroneously read and uncorrected, and
1 3 7	enumerating data subsets that are initially erroneously read and subsequently corrected;
14	and
144 144 144 154	further comprises the step of computing a data integrity rating for the data set using at least
16 ¹ 11 17	one of enumerations of the unreadable data subsets, the erroneously-read-and-
	uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
	105. The system of Claim 101, wherein the data product includes error correction codes, and the
194	evaluating step comprises the steps of:
19U 201	enumerating data subsets that are initially erroneously read and subsequently corrected; and
2	computing a data integrity rating for the data set using enumeration of erroneously-read-
22	and-corrected data subsets.
23	106. The system of Claim 101, wherein the data product includes error correction codes, and the
24	evaluating step comprises the steps of:
25	enumerating data subsets that are initially erroneously read and subsequently corrected, and
26	determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
27	computing a data integrity rating for the data set using at least one of enumeration of the
28	erroneously-read-and-correct data subsets and the over-sampled rating.
29	107. The system of Claim 101, wherein the processor is further programmed for prompting a user
30	to enter data product information for the data product into the data product information

1	database, if the data product is not identified as being listed in the product information
2	database.
3	108. The system of Claim 101, wherein:
4	the data product is a music CD and the data product databases are music CD databases, and
5	the processor is further programmed for
6	reading and storing in the music CD information database any of track information,
7	title, and artist from the CD that is not already stored in the music CD database,
8	prompting the owner to scan cover art of the music CD and storing cover art thus
9	scanned into the music CD information database, if the cover art is not already
10	present in the music CD database,
11	prompting the owner to scan lyrics of the music CD and storing lyrics thus scanned into
120	the music CD information database, if the lyrics are not already present in the
132	music CD database, and
14 <u>1</u>	prompting the owner to scan liner notes of the music CD and storing liner notes thus
130 144 150 164	scanned into the music CD information database, if the liner notes are not already
164	present in the music CD database.
17	109. The system of Claim 101, wherein:
18	the data product is a music CD, and data product information database is a music CD
19群	information database; and
170 180 1907 200	the processor is further programmed for analyzing music data recorded on tracks of the
21	music CD to generate unique track identification data therefor and storing the track
22	identification information in the music CD information database, if the track
23	identification information is not already present in the music CD information database.
24	110. The system of Claim 101, wherein the owner and the buyer may access the databases online.
25	111.A method for generating a data product information database, comprising the steps of:
26	reading data from a data product owned by an owner of the data product;
27	comparing data read from the data product with data in a data product information database;
28	identifying the data product, if the data product is identified as being listed in the data
29	product information database;
30	quantitatively evaluating the integrity of a data set recorded on the data product and
31	computing a data integrity rating for the data product;

1	providing the data integrity rating to the owner; and
2	storing additional data product information read from the data product in the data product
3	information database.
4	112. The method of Claim 111, wherein the data product comprises a CD.
5	113. The method of Claim 111, wherein the data product comprises a DVD.
6	114. The method of Claim 111, wherein the evaluating step:
7	comprises at least two of the steps of
8	enumerating data subsets that are unreadable,
9	enumerating data subsets that are erroneously read and uncorrected, and
10	enumerating data subsets that are initially erroneously read and subsequently corrected;
11	and
12	further comprises the step of computing a data integrity rating for the data set using at least
131	one of enumerations of the unreadable data subsets, the erroneously-read-and-
	uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
150	115. The method of Claim 111, wherein the data product includes error correction codes, and the
16	evaluating step comprises the steps of:
17	enumerating data subsets that are initially erroneously read and subsequently corrected; and
187	computing a data integrity rating for the data set using enumeration of erroneously-read-
17 187 187 100	and-corrected data subsets.
200	116. The method of Claim 111, wherein the data product includes error correction codes, and the
21	evaluating step comprises the steps of:
22	enumerating data subsets that are initially erroneously read and subsequently corrected, and
23	determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
24	computing a data integrity rating for the data set using at least one of enumeration of the
25	erroneously-read-and-correct data subsets and the over-sampled rating.
26	117. The method of Claim 111, further comprising the step of prompting the owner to enter data
27	product information for the data product into the data product information database, if the
28	data product is not identified as being listed in the product information database.
29	118. The method of Claim 111, wherein:
30	the data product is a music CD and the data product databases are music CD databases, and
31	the method further comprises at least one of the steps of

1	reading and storing in the music CD information database any of track information,
2	title, and artist from the CD that is not already stored in the music CD database,
3	prompting the owner to scan cover art of the music CD and storing cover art thus
4	scanned into the music CD information database, if the cover art is not already
5	present in the music CD database,
6	prompting the owner to scan lyrics of the music CD and storing lyrics thus scanned into
7	the music CD information database, if the lyrics are not already present in the
8	music CD database, and
9	prompting the owner to scan liner notes of the music CD and storing liner notes thus
10	scanned into the music CD information database, if the liner notes are not already
11	present in the music CD database.
12	119. The method of Claim 111, wherein:
14	the data product is a music CD, and the data product information database is a music CD
140 140 150 160 17	information database; and
15 <u>1</u>	the method further comprises the steps of analyzing music data recorded on tracks of the
16	music CD to generate unique track identification data therefor and storing the track
17 17	identification information in the music CD information database, if the track
187	identification information is not already present in the music CD information database.
191	120. The method of Claim 111, wherein the data product information database is accessed online
20	121. The method of Claim 120, wherein:
2	a readout device for evaluating the integrity of the data set operatively linked online to the
22	data product information database; and
23	the additional data product information is transmitted online from the readout device to the
24	data product information database.
25	122.A system for generating a data product information database, comprising:
26	a data product information database;
27	a readout device adapted for reading a data set recorded on the data product; and
28	a programmed processor operatively linked to the database and the readout device,
29	wherein the processor is programmed for:
30	reading data from a data product owned by an owner of the data product;
31	comparing data read from the data product with data in a data product information database;

1	identifying the data product, if the data product is identified as being listed in the data
2	product information database;
3	quantitatively evaluating the integrity of a data set recorded on the data product and
4	computing a data integrity rating for the data product;
5	providing the data integrity rating to the owner; and
6	storing additional data product information read from the data product in the data product
7	information database.
8	123. The system of Claim 122, wherein the data product comprises a CD.
9	124. The system of Claim 122, wherein the data product comprises a DVD.
10	125. The system of Claim 122, wherein the evaluating step:
11	comprises at least two of the steps of
12	enumerating data subsets that are unreadable,
	enumerating data subsets that are erroneously read and uncorrected, and
141	enumerating data subsets that are initially erroneously read and subsequently corrected;
15	and
161	further comprises the step of computing a data integrity rating for the data set using at least
17	one of enumerations of the unreadable data subsets, the erroneously-read-and-
187	uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
187	126. The system of Claim 122, wherein the data product includes error correction codes, and the
20	evaluating step comprises the steps of:
⊨ 21	enumerating data subsets that are initially erroneously read and subsequently corrected; and
22	computing a data integrity rating for the data set using enumeration of erroneously-read-
23	and-corrected data subsets.
24	127. The system of Claim 122, wherein the data product includes error correction codes, and the
25	evaluating step comprises the steps of:
26	enumerating data subsets that are initially erroneously read and subsequently corrected, and
27	determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
28.	computing a data integrity rating for the data set using at least one of enumeration of the
29	erroneously-read-and-correct data subsets and the over-sampled rating.
30	128. The system of Claim 122, wherein the processor is further programmed for prompting the
31	owner to enter data product information for the data product into the data product

1	information database, if the data product is not identified as being listed in the product
2	information database.
3	129. The system of Claim 122, wherein:
4	the data product is a music CD and the data product databases are music CD databases, and
5	the processor is further programmed for
6	reading and storing in the music CD information database any of track information,
7	title, and artist from the CD that is not already stored in the music CD database,
8	prompting the owner to scan cover art of the music CD and storing cover art thus
9	scanned into the music CD information database, if the cover art is not already
10	present in the music CD database,
11	prompting the owner to scan lyrics of the music CD and storing lyrics thus scanned into
12	the music CD information database, if the lyrics are not already present in the
13	music CD database, and
140	prompting the owner to scan liner notes of the music CD and storing liner notes thus
1300 140 150 160 17	scanned into the music CD information database, if the liner notes are not already
1 6 □	present in the music CD database.
17	130. The system of Claim 122, wherein:
18 Th	the data product is a music CD, and the data product information database is a music CD
191	information database; and
20	the processor is further programmed for analyzing music data recorded on tracks of the
2	music CD to generate unique track identification data therefor and storing the track
22	identification information in the music CD information database, if the track
23	identification information is not already present in the music CD information database.
24	131. The system of Claim 122, wherein the data product information database is accessed online.
25	132. The system of Claim 131, wherein:
26	the readout device for evaluating the integrity of the data set operatively linked online to at
27	least one of the data product information database and the programmed processor; and
28	the additional data product information is transmitted online from the readout device to the
29	data product information database.